VTM
VEHICLE & TRANSPORTATION TECHNOLOGY INNOVATION MEETINGS

hd motion
Hub for the digital mobility transformation

HD MOTION PROJECT

Digital Transformation Services for Sustainable Mobility

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VTM
VEHICLE & TRANSPORTATION TECHNOLOGY INNOVATION MEETINGS
26&27 MARCH | 2024
B2B MEETINGS - EXHIBITION - PLENARY CONFERENCE
INTERNATIONAL BUSINESS CONVENTION FOR AUTOMOTIVE & VEHICLE INNOVATION
4th EDITION
TORINO, ITALY

EDIH Network

The EDIH Network is a community of tech experts dedicated to guiding Europe's businesses on their path to digital transformation.

- About **400 EDIH** addressing digital challenges **in all the** industrial **technology fields**.
- **48 dedicated** only **to Mobility**

https://european-digital-innovation-hubs.ec.europa.eu/edih-catalogue

Digital Europe programme
Co-funded by the European Commission and Member States/ Associated Countries.

Seal of Excellence
Positively evaluated in a European competitive call but funded exclusively by national or regional resources.

European Commission

SEAL OF EXCELLENCE
The EU quality label for first-class innovative ideas worthy of investment

Ministero delle Imprese e del Made in Italy

GOALS

HD-MOTION – Hub for the **D**igital **M**obility **T**ransformati**on –** was created with the **ambition to encourage a rapid acceleration in the development of enabling technological solutions,** in the field of innovation and digitalization of **sustainable mobility and transport services**.

Strengthening the competitiveness of public sector organizations

Improving the competitiveness of private companies, the mobility supply chain and transport service providers

Partners & Knowledge

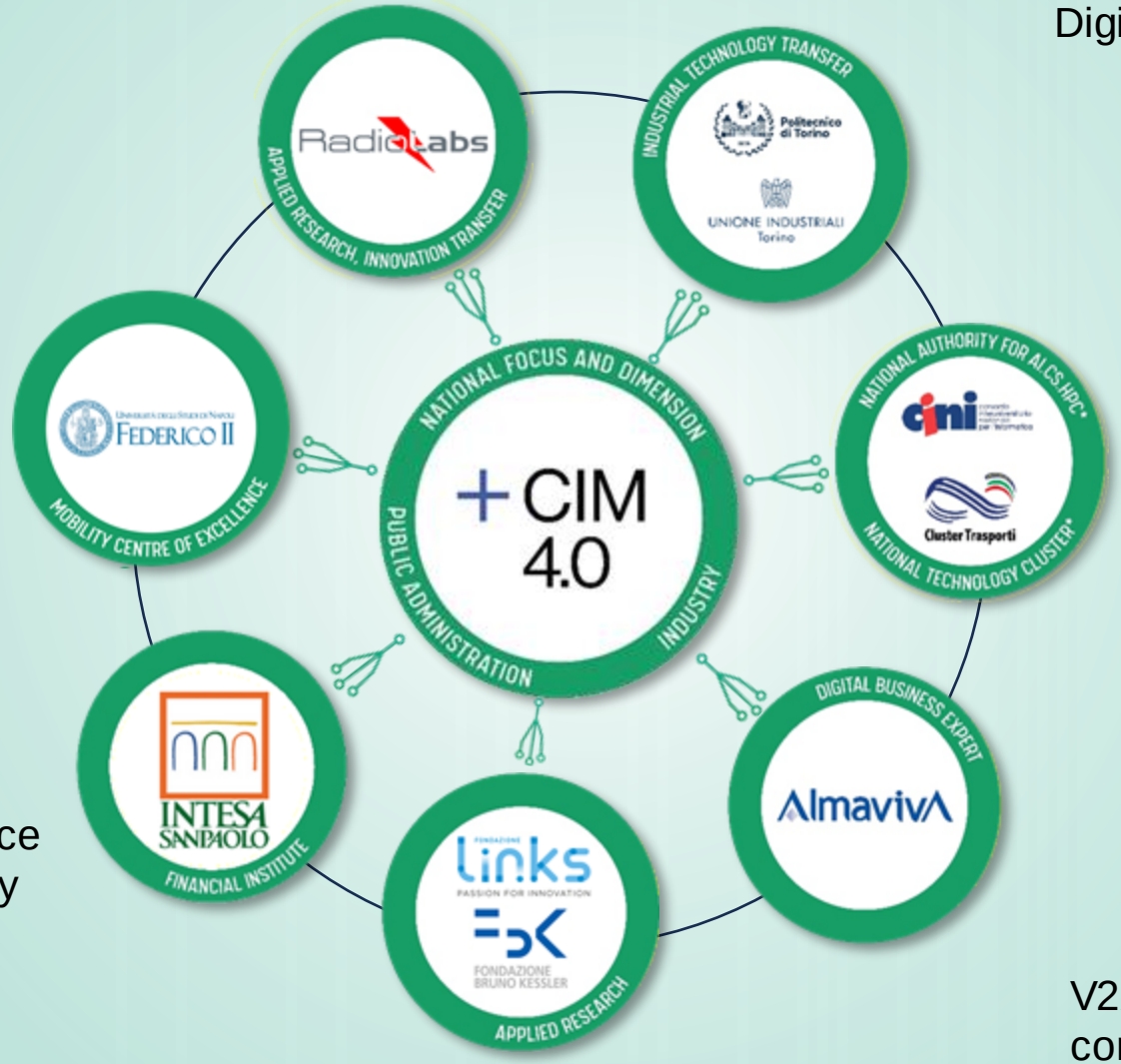
ICT for Transport and Logistics sector

Cooperative, Connected and Automated Mobility

Transport Engineering

Sustainability, social and cultural responsibility

Artificial Intelligence and CyberSecurity



Digital Mobility

Impact on market and society

Digitalization of industrial processes

Machine-learning and Artificial Intelligence

Connected and autonomous vehicles

Innovation in ICT

V2X and in-car communications

TECHNOLOGIES

ENABLING TECHNOLOGIES

- New communication technologies (5G, 6G, C-V2X)
- Internet of Things, sensors for infrastructure and vehicles
- Distributed intelligence, cloud systems, fog, edge computing
- Augmented Reality, Computer Vision
- Simulation and Digital Twin of Vehicles and Systems

CORE TECHNOLOGIES

- Artificial Intelligence (AI)
- High-Performance Computing (HPC)
- Cybersecurity (CS)

Users

The **end-users** of HD Motion are **SMEs**, in particular those involved in technology transfer, the **Public Administration**, with its services (e.g. Public Transport) and citizens.

- **Mobility Service Providers**
- **Public transport companies**
- **Logistic companies**
- **Vehicle manufacturers**
- **Public authorities (mobility planner)**

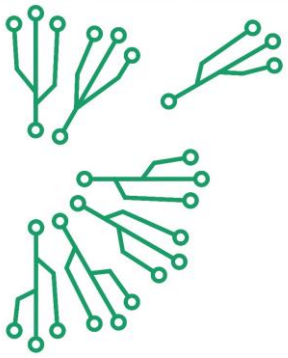
SERVICES

TEST BEFORE INVEST
Make testing, training and mentoring facilities available to SMEs and PAs, creating new laboratories or improving existing ones.

SKILLS AND TRAINING
Advanced training courses based on a Challenge-Based-Learning approach

SUPPORT TO FIND INVESTMENTS
Access to funding for innovation and for partnership in participation to calls.

INNOVATION ECOSYSTEM & NETWORKING
Create virtuous business and innovation systems, promoting collaboration between companies, research centers and public administrations



Test before Invest – Testing Facilities	Skills and Training – Training and Education	Support to find investments – Funding Opportunities	Innovation ecosystem and networking – Users & partners Connections
Connected, Autonomous and Green Vehicle Testing	Real-time control of digital transport systems	Definition of organic investment plans	Cooperation with other Italian/European clusters
Digital twin of areas and traffic, massive simulation	Intermodal logistics Networks coordination	Visioning: technology and business assessment	Identification of new local, national and international markets
AI Techniques for Behavior Change	Sustainable Mobility Academy	Visioning: IP analysis	Animation of the innovation and networking ecosystem
Edge/Fog Platforms for Low-Latency Services	Application of Mobility technologies	Visioning: financial advisory	Matching offer and demand
Advanced Automotive Production Monitoring Systems	New ICT technologies for the mobility sector	Mapping EU funding	Contamination of knowledge and skills
Connected and collaborative systems for LPT and intermodality.	Innovation Plans for Strategic Mobility	Project Development: consultancy	
MAAS Mobility As A Service	Certification of trust, integrity, authenticity of data	Project Development: IP consulting	
	Mobility User Privacy Protection Solutions	Access to funding: evaluation	
	Methodologies for the cybersecurity of users in shared mobility	Access to funding: advisory	
	Business Coaching	Access to capital: advisory	
		Access to capital: Startup's Initiative (SUI)	

Example - Mobility As A Service

Integration of different services and personal alternatives for mobility

Target alternatives

- Bicycle - personal and shared
- Electric scooter - shared
- Vehicles - Shared, public, personal
- Parking - standard and charging slots
- Buses and tramways - urban transport
- Buses and trains - extra urban transport

Technologies

- Cloud data storage and integration
- AI for mission definition
- 5G/fast communication

Final user expectations

- Quick access to alternatives
- Unique mobility services access
- Simple mission and travel planning
- Easy reservation, pricing and billing
- Standard application for many cities

Example - Mobility Data

Road users helps in checking quality of the road for safety riding (potholes or uneven surface)

Target alternatives

- Bicycle - personal and shared
- Electric scooter - shared
- Vehicles - Shared, public, personal

Technologies

- Cloud data storage and integration
- IOT “g”, speed and localization
- IOT “g” sensors

PA expectations

- Quick comunication
- Detailed position
- Severity of the damage
- Easy reservation, pricing and billing
- Standard application for many cities

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